

**IN THE CLAIMS:**

Please amend the claims as follows:

1. **(Canceled)**

2. **(Currently Amended)** A fuel cell comprising a tubular casing, an electrolyte layer received in said tubular casing, a first gas diffusion electrode completely defining a fuel gas passage and a second gas diffusion electrode completely defining an oxidizing gas passage, wherein said first and second gas diffusion electrodes interpose said electrolyte layer, wherein:

said first and second gas diffusion electrodes each comprise a plurality of layers of material stacked in the axial direction of said tubular casing, wherein said fuel and oxidizing gas passages, which extend in the axial direction, each have a non-uniform diameter and

said first gas diffusion electrode extends continuously along said fuel gas passage;

said second gas diffusion electrode extends continuously along said oxidizing gas passage, and wherein said tubular casing comprises high polymer solid electrolytic material surrounding said first and second gas diffusion electrodes, and said electrolyte layer is formed of said high polymer solid electrolytic material; and

said fuel cell further comprises a first lead attached to said first gas diffusion electrode at one axial end of said tubular casing such that said first gas diffusion electrode is electrically connected to an external circuit by said first lead and a second lead attached to said second gas diffusion electrode at the other axial end of said

tubular casing such that said second gas diffusion electrode is electrically connected to said external circuit by said second lead;

said fuel gas passage and said oxidizing gas passage each having an entrance at a first common plane, wherein said entrance of said fuel gas passage is separate and distinct from said entrance of said oxidizing gas passage; and

said fuel gas passage and said oxidizing gas passage each having an exit at a second common plane, wherein said exit of said fuel gas passage is separate and distinct from said exit of said oxidizing gas passage,

wherein the first and second common planes extend orthogonally relative to the axial direction of said tubular casing.

3. **(Previously Presented)** A fuel cell according to claim 2, wherein said tubular casing also comprises a plurality of layers of material therefore stacked in the axial direction of said tubular casing.

Claim 4. **(Cancelled).**

5. **(Previously Presented)** A fuel cell according to claim 3, wherein said gas passages are defined by separating an interior of said tubular casing with said electrolyte layer and said gas diffusion electrodes.

Claims 6-10. **(Canceled).**

11. **(Previously Presented)** A fuel cell according to claim 2, wherein neighboring layers of material of said plurality of layers of material are mis-registered relative to each other to form a step in a respective one of said fuel gas passage and said oxidizing gas passage.

12. **(Previously Presented)** A fuel cell according to claim 2, wherein at least one of said fuel gas passage and said oxidizing gas passage becomes progressively narrower in a direction from an upstream end toward a downstream end.

13. **(Currently Amended)** A fuel cell comprising a tubular casing, an electrolyte layer received in said tubular casing, and a pair of gas diffusion electrodes interposing said electrolyte layer and defining a fuel gas passage and an oxidizing gas passage, respectively, wherein:

each gas diffusion electrode comprises a plurality of layers of material stacked in the axial direction of said tubular casing;

each gas diffusion electrode extends continuously along its associated gas passage;

said tubular casing comprises high polymer solid electrolytic material surrounding said pair of gas diffusion electrodes, and said electrolyte layer is formed of said high polymer solid electrolytic material; and

said fuel cell further comprises a first lead attached to one of said gas diffusion electrodes at one axial end of said tubular casing such that said one of said gas diffusion electrodes is electrically connected to an external circuit by said first lead and a second lead attached to the other of said gas diffusion electrodes at the other axial end of said tubular casing such that said other of said gas diffusion electrodes is electrically connected to said external circuit by said second lead;

said fuel gas passage and said oxidizing gas passage each having an entrance at a first common plane, wherein said entrance of said fuel gas passage is separate and distinct from said entrance of said oxidizing gas passage; and

said fuel gas passage and said oxidizing gas passage each having an exit at a second common plane, wherein said exit of said fuel gas passage is separate and distinct from said exit of said oxidizing gas passage,

wherein the first and second common planes extend orthogonally relative to the axial direction of said tubular casing.

Claims 14-16(**Cancelled**).

17. **(Previously Amended)** The fuel cell according to claim 13, wherein one gas diffusion electrode of the pair of gas diffusion electrodes completely and solely defines the fuel gas passage and the other gas diffusion electrode of the pair of gas diffusion electrodes completely and solely defines the oxidizing gas passage.

18. **(New)** The fuel cell according to claim 2, wherein said first and second common planes extend across a common surface.

19. **(New)** The fuel cell according to claim 13, wherein said first and second common planes extend across different surfaces.